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|-----------------|-------------|---|-------------------------------|------------------------|
| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR  | ATTORNEY DOCKET NO.           | CONFIRMATION NO.       |
| 10/723,344      | 11/26/2003  | Christian Alexander Lang  | Y0R920030480US1               | 8235                   |
| 7590            | 10/17/2007  | Ryan, Mason & Lewis, LLP<br>90 Forest Avenue<br>Locust Valley, NY 11560 | EXAMINER<br>VAUGHN, GREGORY J |                        |
|                 |             |   | ART UNIT<br>2178              | PAPER NUMBER           |
|                 |             |   | MAIL DATE<br>10/17/2007       | DELIVERY MODE<br>PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|                              |                        |                     |
|------------------------------|------------------------|---------------------|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |
|                              | 10/723,344             | LANG ET AL.         |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |
|                              | Gregory J. Vaughn      | 2178                |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 17 July 2007.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-4,6-14 and 16-19 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-4,6-14 and 16-19 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

|  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application |
|  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Action Background***

1. This action is responsive to the amendment filed on 7/17/2007.
2. Applicant has amended claims 1, and 16-19. Claims 5 and 15 were previously canceled
3. Claims 1-4, 6-14 and 16-19 are pending in the case, claims 1, 16, 17 and 18 are independent claims.
4. Examiner's rejection of claim 19, made under 35 USC 112 in the *Claim Rejections* – 35 USC 112 section of the previous office action (dated 4/17/2007) is withdrawn in view of the amended claim.
5. Examiner's rejection of claims 1 and 16-18, made under 35 USC 112 in the *Claim Rejections* – 35 USC 112 section of the previous office action (dated 4/17/2007) is withdrawn in view of the applicant's remarks.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

*"A person shall be entitled to a patent unless –*

*(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language."*

7. Claims 1-4, 6-14 and 16-19 remain rejected under 35 U.S.C. 102(e) as being anticipated by Neal et al. US Patent 6,697,799, filed 10/24/2002, patented 2/24/2004 (hereinafter Neal).

8. **Regarding independent claim 1**, Neal discloses annotating a document by assigning a classification to the document. Neal recites: "*The present invention allows an item to automatically be classified using its attributes based on a classification schema and a knowledge base*" (column 2, lines 23-25). Neal discloses obtaining a user proposed annotation (in the form of a classification) to be associated with the document and automatically determining, in accordance with a knowledge base, whether the user-proposed annotation matches at least one allowed classification. Neal recites: "*the invention can include selecting a first attribute of the item, designating a*

*first search strategy comprising the value of the first attribute applied to operate upon data records in a first database*" (column 2, lines 25-28). Neal discloses a user proposed classification in figure 8, at reference sign 812 (shown as "Add").

Neal discloses automatically selecting a match when more than one match is found in Figure 6A, at reference sign 115 (shown as "*Can the Item Be Automatically Classified*"). Neal discloses annotating the document in Figure 1 at reference sign 17 (shown as "*Formatted Classified Content*").

Neal discloses automatically determining the annotation in Figure 4 at reference sign 21 (shown as "*Automatic Classification Knowledge Database*"). Neal discloses a first and second determining mode, where the annotation is selected by the user or automatically. Neal recites: "*The determination as to whether or not to automatically classify an item can be made using thresholds. The thresholds can be made configurable by a system manager depending upon the need for accuracy as balanced against the amount of operator interaction desired. In this approach, the confidence score at each search view is compare to a configurable threshold. If the score is above the threshold, then it is automatically classified. If it is below the threshold, then it is submitted to a user for human review and selection*" (column 11, lines 48-56).

9. **Regarding dependent claim 2,** Neal discloses notifying the user that the user-proposed annotation (in the form of a classification) does not match at

least one allowed classification when a match is not found in Figure 2 at reference sign 114 (shown as "*Display Results (Even If 0 Found)*").

10. **Regarding dependent claim 3**, Neal discloses storing a user proposed annotation (in the form of a classification) match when a match is found in Figure 3 at reference sign 51 (shown as "*Updated Classification Knowledge Database*").

11. **Regarding dependent claim 4**, Neal discloses notifying the user that the user proposed annotation (in the form of a classification) matches more than one allowed annotation, when more than one match is found in figure 8 at reference sign 820 (shown as a list of a plurality of matches).

12. **Regarding dependent claim 6**, Neal discloses notifying the user of match results after each attempted matching operation in Figure 6C at reference sign 155 (shown as "*Present the Categories and Confidence score to a User*").

13. **Regarding dependent claim 7**, Neal discloses a predetermined number of matching operations in Figure 4 at reference sign 59 (shown as "*Search Method Definition*"), and wherein the figure discloses an exemplary number of 3 matching operations.

14. **Regarding dependent claims 8-10**, Neal discloses a history buffer of matches (claim 8), using the history buffer to update a set of allowed classifications (claim 9) and using the history buffer to disambiguate matches

(claim 10) in Figure 3 at reference sign 43 (shown as "*Classification Reference Database*"), 51 (shown as "*Updated Classification Knowledge Database*") and 47 (shown as "*Standards Database*").

15. **Regarding dependent claim 11**, Neal discloses determining a closeness between the user-proposed annotation (in the form of a classification) and the allowed classification in Figure 4 at reference sign 75 (shown as "*Search Method Scoring Weights*").
16. **Regarding independent claims 16, 17 and 18**, the claims are directed toward an apparatus, article of manufacture and a method, respectively, for the method of claim 1, and are rejected using the same rationale.
17. **Regarding dependent claim 19**, Neal discloses the user proposed annotation is stored, when the user proposed annotation matches the allowed annotation, such that the user proposed annotation is useable in a subsequent match operation. Neal discloses a user proposed annotation and annotation matching, as described above. Neal discloses storing the classification information as a side effect of the classification process when new class information is presented in Figure 3 at reference sign 51 (shown as "*Update Classification Knowledge Database*").

***Claim Rejections - 35 USC § 103***

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*"(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made."*

19. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neal in view of Handschuh et al., S-CREAM – Semi-Automatic Creation of Metadata, copyright 2002 (hereinafter Handschuh).

20. **Regarding dependent claims 12-14,** Neal discloses obtaining a user proposed annotation (in the form of a classification), and automatically determining if the user-proposed annotation matches an allowed annotation from a knowledge base. Neal fails to disclose the knowledge base as a term graph. However Handschuh discloses the use of a term graph (claim 12), computing a distance between the user-proposed annotation (in the form of a classification) and an allowed annotation (claim 13) and a stemming operation (claim 14) in the diagram at the top of page 4.

Therefore it would have been obvious, to one of ordinary skill at the time the invention was made, to combine the annotation system of Neal with the

term graph of Handschuh, in order to calculate the degree of separation between the user-proposed term and the allowed term, which would indicate to a system user the allowability of the proposed term.

### ***Response to Arguments***

21. Applicant's arguments filed 7/17/2007 with respect to the rejections made under 35 USC 102(e) have been fully considered but they are not persuasive.
22. Regarding the claimed invention in general, applicant argues that the claimed invention is patentably distinguishable from Neal, because the claimed invention is directed toward annotating documents, while Neal is directed toward classifying items (page 8, fourth paragraph to page 9 first paragraph of the response filed 7/17/2007). Neal discloses documents as items. Neal recites: "*As discussed above, the items can be tangible or intangible, documents, services, software or any other type of items capable of being described*" (column 3, lines 41-43). Neal discloses an item that has been annotated in Figure 3 at reference sign 17 (shown as "*classified item*"). Neal is directed toward a specialized annotation system where the annotation provides a classification to the item being annotated. Furthermore, applicant's Figures 1-4 are diagrams of preferred embodiments of the claimed invention. A close examination of these figures shows that the allowed annotations appear to be classification related. For instance Figure 2 discloses the annotator (a user using the system) who proposes the annotation "dog". The resultant allowed annotation shown in the Figure 2 embodiment is "*animal*"

where the "Mediator" process is directed toward group associations to determine the correct "*allowed annotation*".

23. Applicant further argues that Neal fails to disclose the annotation modes recited in the independent claims (page 9, second paragraph, of the response filed 7/17/2007). Applicant is directed to the rejection of claim 1 as recited above. Neal discloses a multi mode process including an automatic mode, which does not require a user intervention, and a user mode, where the user is required to select from a set of potential matches. Again it should be noted that Neal is directed toward a specialized annotation system where the annotation provides a classification to the item being annotated.

24. Regarding dependent claim 4, applicant argues that reference sign 820 in Figure 8 fails to disclose the notifying aspect of the claim (page 10, second paragraph, of the response filed 7/17/2007). Reference sign 820 in Figure 8 is relied upon to show a display of notifying the user of multiple matches. Reference sign 820 discloses 3 matches, shown as "*Manufacture Name*", "*Manufacture Part Number*" and "*UNSPSC*". Figure 8 represents a user interface that would be viewable by a system user, and would provide notification to the user that more than one match had been found.

25. Regarding claims 8-10, applicant argues that Neal's Figure 3 fails to disclose the claimed features (page 10, fourth paragraph to page 11, third paragraph, of the response filed 7/17/2007). Applicant has also provided a quote from Neal, and a description of the history buffer determining "hot" and

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"cold" terms. Applicant is directed to the rejection of claims 8-10 as recited above. The examiner is relying on reference signs 43, 47 and 51 to show the claimed features (the quote from Neal is directed to different aspects of Figure 3). In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "hot" and "cold" terms) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

### ***Conclusion***

26. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action.

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In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory J. Vaughn whose telephone number is (571) 272-4131. The examiner can normally be reached Monday to Friday from 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen S. Hong can be reached at (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



STEPHEN HONG  
SUPERVISORY PATENT EXAMINER

Gregory J. Vaughn  
Patent Examiner  
October 1, 2007